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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,099	09/30/2003	David D. Brandt	02AB201/YOD ALBR:0123	4810
7590 11/04/2004			EXAMINER	
Alexander M. Gerasimow Allen-Bradley Company, LLC 1201 South Second Street Milwaukee, WI 53204-2496			ESTRADA, ANGEL R	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,099

Applicant(s)

BRANDT ET AL.

Examiner

Angel R. Estrada

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-37 is/are allowed.
- 6) ☒ Claim(s) 14, 15, 17-28 and 31 is/are rejected.
- 7) ☒ Claim(s) 16, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to because of the following informalities:

In claim 14 line 7, after "electrical power;" delete "and".

In claim 14 line 6-7, "first and second data conductor configured to conduct electrical power", confusing and unclear. Examiner believes that the data conductors should be configured to transmit data signals instead electrical power.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 14, 15, 17-25 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Toh et al (US 6,672,884; hereinafter Toh).

Regarding claim 14, Toh discloses a rail system (14) for transmitting power and data signals comprising: an insulative support (16, see figure 1); first and second power conductors (32, see figure 1 located on each side of the support) supported lengthwise on the support (16) via an elongated support edge (see figure 1) and configured to

conduct electrical power (column 2 lines 44-62); and first and second data conductors (34) supported lengthwise on the support (16) via an elongated support edge (see figure 1) and disposed between the power conductors (32) and configured to transmit data signals (column 2 lines 44-62); wherein each of the power and data conductors (32,34) present a respective elongated connection edge (see figures 1 and 2) opposite the respective support edge (see figure 1 and 2) , the connection edges being generally aligned for receiving respective connectors elements (column 2 lines 55-59).

Regarding claim 15, Toh discloses the system (14), wherein the power conductors (32) at least partially shield the data conductors (34) from electromagnetic interference (since the data connectors are between the first and second power conductors, see figure 1).

Regarding claim 17, Toh discloses the system (14), wherein further comprising a second set of power conductors (32, see figure 1 located on each side of the support 32) supported lengthwise on the support at cross sectional outermost position on either side of the first and second power conductors*.

*Note: The reference number 32 is referred to contact portions, each side of the rail system (14) has four contact portions (32, see figure 1), the first set of power conductors will be the inner contact portions, which are located next to the data conductors (34), and the second set of power conductors will be the outer contact portions, which are located next to the inner contact portion (see figure 1).

Regarding claim 18, Toh discloses the system (14), wherein the conductors (32,34) are uninsulated conductive rails (see figures 1 or 2)

Regarding claim 19, Toh discloses the system (14), wherein the first and second data conductors (34) are spaced from one another by a first, substantially constant predetermined distance (see figure 1).

Regarding claim 20, Toh discloses the system (14), wherein the first and second power conductors (32) are spaced from respective data conductors (34) by a second substantially constant predetermined distance (see figure 1).

Regarding claim 21, Toh discloses the system (14), wherein the first predetermined distance is equal to the second predetermined distance (see figure 1).

Regarding claim 22, Toh discloses a rail system (14) for transmitting power and data signals comprising: an insulative support (16); a first set of power conductors (32, outer contact portion) supported lengthwise on the support (16) and configured to conduct electrical power (column 2 lines 44-54); a second set of power conductors (32 inner contact portion) supported lengthwise on the support and configured to conduct electrical power (column 2 lines 44-54); and first and second data conductors (34) supported lengthwise on the support and configured to transmit data signals (column 2 lines 44-54).

Regarding claim 23, Toh discloses the system (14), wherein if the first set of power conductors (32, outer contact portion) are identified as A and B, the second set of power conductors (32, inner contact portion) are identified as C and D, and the data conductors (34) are identified as E and F, the conductors are disposed cross-sectionally on the support (16) in the order A, C, E, F, D, B (see figure 1).

Regarding claim 24, Toh discloses the system (14), wherein conductors A and B (32, outer contact portion) can be configured to transmit ac power (column 2 lines 45-62). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 25, Toh discloses the system (14), wherein conductors C and D (32, inner contact portion) can be configured to transmit dc power (column 2 lines 45-62). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 31, Toh discloses the system (14), wherein the conductors (32, 34) are disposed at substantially equal spacing across the support (see figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toh et al (US 6,672,884; hereinafter Toh).

Regarding claim 26, Toh discloses the system (14), wherein the first set of power conductors (32, outer contact portion) can be identified as A and B, the second set of power conductors (32, inner contact portion) can be identified as C and D, and the data conductors (34) can be identified as E and F; but lacks the conductors being disposed cross-sectionally on the support (16) in the order A, E, C, D, F, B. It would have been obvious to one having ordinary skill in the art at the time the invention was made to disposed the conductors on the support in the order A, E, C, D, F, B, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 27, Toh discloses the system (14), wherein conductors A and B (32, outer contact portion) can be configured to transmit ac power (column 2 lines 45-62). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claim 28, Toh discloses the system (14), wherein conductors C and D (32, inner contact portion) can be configured to transmit dc power (column 2 lines 45-62). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Allowable Subject Matter

4. Claims 32-37 are allowed.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 32-37 is:

Regarding claims 32-37, the prior art does not teach or fairly suggest in combination with the other claimed limitation an open rail system comprising a capacitor coupled across the first set of power conductors

This limitation was found in claims 32-37, and is neither disclosed nor taught by the prior art of record, alone or in combination.

5. Claims 16, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 16, 29 and 30 are:

Regarding claim 16, the prior art does not teach or fairly suggest in combination with the other claimed limitation a rail system comprising at least one capacitor coupled across the power conductors.

Regarding claims 29 and 30, the prior art does not teach or fairly suggest in combination with the other claimed limitation a rail system comprising a first capacitor coupled across the second set of power conductors.

These limitations were found in claims 16, 29 and 30, and are neither disclosed nor taught by the prior art of record, alone or in combination.

Response to Arguments

6. Applicant's arguments with respect to claims 14-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone

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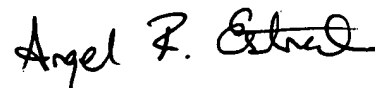
number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AE

October 29, 2004



Angel R. Estrada
Patent Examiner
Art Unit: 2831